



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,616	02/25/2002	David J. Perreault	MIT-106PUS	4461
22494	7590	07/06/2004	EXAMINER	
DALY, CROWLEY & MOFFORD, LLP			TAKAOKA, DEAN O	
SUITE 101			ART UNIT	
275 TURNPIKE STREET			PAPER NUMBER	
CANTON, MA 02021-2310			2817	

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s) OK	
	10/082,616	PERREAULT ET AL.	
	Examiner	Art Unit	
	Dean O Takaoka	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 11-13, 34, 44 and 62-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14-23, 28-30, 32, 33, 37-43, 45-47, 50-52 and 54-61 is/are rejected.
- 7) ☒ Claim(s) 24, 25, 31, 35, 36, 48, 49 and 53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/12/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 – 5, 27, 33, 38 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Mullersman (U.S. Patent No. 4,577,145) for reasons of record contained in the office action dated August 27, 2003.

Claims 1, 3 – 5, 33, 38 and 40 have not been amended and remain anticipated by Mullersman.

Claim 27 has been amended to include the limitation having first and second ends. It is the position of the Examiner that the LC device shown in Fig. 2 shows the inductively coupled winding circuit having first and second ends, thus the claim remaining anticipated by Mullersman.

Claims 1, 2, 4, 14 – 16, 27, 32, 38, 39, and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimura et al. (U.S. Patent No. 5,495,405) for reasons of record contained in the office action dated August 27, 2003.

Claims 1, 2, 4, 14 – 16, 32, 38, 39, and 45 have not been amended and remain anticipated by Fujimura et al.

Claim 27 has been amended to include the limitation having first and second ends. It is the position of the Examiner that the LC device shown in Figs. 1,2,4 shows the capacitor (i.e. secondary side capacitor 5 – Fig. 1) having first and second ends (shown by the circuit in Fig. 1), discussed in the reasons for rejection of claim 1 of record, thus the claim remaining anticipated by Fujimura et al.

Claims 1, 3, 9, 10, 14 – 23, 26 – 30, 33, 37, 38, 40, 42, 43, 45 – 47, 54, and 55 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchida et al. (U.S. Patent No. 6,476,689), prior art disclosed by the Applicant, for reasons of record contained in the office action dated August 27, 2003.

Claims 1, 3, 9, 10, 14 – 23, 26, 28 – 30, 33, 37, 38, 40, 42, 43, 45 – 47, 54, and 55 have not been amended and remain anticipated by Uchida et al.

Claim 27 has been amended to include the limitation having first and second ends. It is the position of the Examiner that Uchida et al. (best shown in Fig. 4) shows an electrical component comprising: a capacitor (C) having first and second ends (shown by the circuit in Fig. 4), discussed in the reasons for rejection of claim 1 of record, thus the claim remaining anticipated by Uchida et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 – 8, 10, 41, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullersman in view of Waffenschmidt et al. (U.S. Patent No. 6,529,363) for reasons of record contained in the office action dated August 27, 2003. Claims 6 – 8, 10, 41, and 43 have not been amended and remain unpatentable over Mullersman in view of Waffenschmidt et al.

Claims 10 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. in view of Chang et al. (U.S. Patent No. 6,239,557) for reasons of record contained in the office action dated August 27, 2003. Claims 10 and 43 have not been amended and remain unpatentable over Fujimura et al. in view of Chang et al.

Claims 50 – 52, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al., prior art disclosed by the Applicant in view of Hamill et al. (A 'Zero" Ripple Technique Applicable To Any DC Converter), prior art disclosed by the Applicant for reasons of record contained in the office action dated August 27, 2003.

Claims 50 – 52, 56 and 57 have not been amended and remain unpatentable over Uchida et al. in view of Hamill et al.

Claims 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. and Hamill et al., prior art disclosed by the Applicant, as applied to claim 56 above, and further in view of Smith et al. (U.S. Patent No. 5,694,297) for reasons of record contained in the office action dated August 27, 2003.

Claims 58 and 59 have not been amended and remain unpatentable over Uchida et al. and Hamill et al., as applied to claim 56 above, and further in view of Smith et al.

Claims 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. and Hamill et al., prior art disclosed by the Applicant as applied to claim 56 above, and further in view of Waffenschmidt et al. for reasons of record contained in the office action dated August 27, 2003.

Claim 60 has been amended where the coupled windings are printed. It is the position of the Examiner that the limitation “printed” is given no patentable weight in a device claim, where only the end product which is patentable thus any limitations directed to a specific nature of “making” is regarded as product-by-process and that the claim is directed to the product per se, no matter how such product was made. It has been well established by the Courts that it is the patentability of the final product per se which must be determined in a “product-by-process” claim, and not the patentability of the

process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product-by-process" form or not.

See *In re Hirao*, 190 USPQ 15 at 17 (footnote 3); *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessman*, 180 USPQ 324, *In re Avery*, 186 USPQ 161; *In re Marosi et al.*, 218 USPQ 289; and in particular *In re Thorpe*, 227 USPQ 964. It should be noted that the applicant has the burden of proof in such cases, as the above case law makes clear.

As detailed in prior office action of record, Waffenschmidt et al. discloses a well-known art-recognized equivalent method of forming windings such as CVD, thus the claim remains unpatentable over Uchida et al. and Hamill et al., as applied to claim 56 above, and further in view of Waffenschmidt et al.

Claim 61 has not been amended and remains unpatentable over Uchida et al. and Hamill et al., prior art disclosed by the Applicant as applied to claim 56 above, and further in view of Waffenschmidt et al.

Response to Arguments

Cancellation of claims 11-13, 34, 44, and 62-66 without prejudice is acknowledged.

Applicant's arguments, see page 10 of 17, filed February 6, 2004, with respect to claims 4 and 5 have been fully considered and are persuasive. The objection of claims 4 and 5 has been withdrawn.

Applicant's arguments filed February 6, 2004 with respect to claims rejected under 35 U.S.C. 102(b) or 102(e) and 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

Claims 1, 3 – 5, 27, 33, 38, and 40 anticipated by Mullersman:

The Applicant submits that "Mullersman is not relevant to the claimed invention which is directed to canceling the inductance (associated with stored magnetic energy) of a capacitor." The functionality of the Applicant's invention is presented where "the parasitic inductance associated with capacitors at certain frequencies is typically undesirable. The present invention provides a circuit to cancel the parasitic inductance of capacitors using coupled windings" and concludes that "the present invention achieves a different physical effect than the system of Mullersman, and does not accomplish it using resonance as in Mullersman".

It is the position of the Examiner that Mullersman anticipates the claims as presented where the Applicant acknowledges the well-known properties of resonance where cancellation of capacitive and inductive reactances taught by Mullersman occur, thus providing "capacitor-path inductance cancellation". The path of inductance and capacitance of Mullersman propagate in the same path, as shown by the LC resonant circuit in Fig. 3 with the resonant tank circuit 25 and associated circuitry further shown in Fig. 1, therefore it is the position of the Examiner that the claim/s as presented remain anticipated by Mullersman, thus the rejection/s is/are maintained.

With regard to claims 2 – 10, 14 – 33, 35 – 43 and 45 – 61, the Applicant argues that for the reasons argued with respect to claims 1, 3 – 5, 27, 33, 38, and 40, claims 2

– 10, 14 – 33, 35 – 43 and 45 – 61 are also distinguishable over Mullersman. It is the position of the Examiner that for reasons stated with respect to claims 1, 3 – 5, 27, 33, 38, and 40 in the Examiners response to arguments above, claims 2 – 10, 14 – 33, 35 – 43 and 45 – 61 also remain anticipated by Mullersman, thus the rejection/s is/are maintained.

With regard to claim 27, the Applicant argues that “there is no requirement for the preamble to “breath life and meaning” into the claim”. It is the position of the Examiner that the preamble of claim 27 recites “A method of suppressing electrical signals” where the “method” is generic defined by the structure of the circuit and function, thus the generic “method” “breathing no life into the claim”. The function of resonance of Mullersman is discussed above with respect to claim/s 1 et al. where the resonance of Mullersman inherently anticipates the limitation of suppressing electrical signals. As is well-known, a resonant frequency occurs from the resonant circuit where Mullersman teaches that the reactances cancel over a band of frequencies immediately above and below the resonant frequency (col. 3, lines 51-56), thus suppressing the electrical signals, thus the rejection/s is/are maintained. The Examiner further directs Applicant’s attention where the “method” contained in the preamble is generic, defined by the structure of the circuit and function, thus the generic “method” “breathing no life into the claim”. It has been well established in the courts that recitations in the preamble have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the

claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claims 1, 2, 4, 14 – 16, 27, 32, 38, 39, and 45 anticipated by Fujimura et al.:

The Applicant argues that Fujimura is also directed to resonant circuits where “Fujimura discloses a circuit that uses parasitic capacitance as a component of a resonant circuit. Fujimura does not teach or suggest the cancellation of inductance associated with a capacitor as required by the claimed invention.” and “Accordingly, Applicant submits that claims 1, 2, 4, 14 – 16, 27, 32, 38, 39, and 45 are patentably distinguishable over Fujimura taken alone or in combination with other references of record” to which the Examiner disagrees.

Fujimura et al. (Figs. 1,2,4) shows a capacitor 5 with a circuit coupled to the capacitor, the circuit including magnetically coupled windings for providing capacitor-path inductance cancellation (of record) where the capacitive component and inductive component cancel out each other (col. 8, lines 4-6; of record). As with Mullersman, Fujimura et al. creates a resonant condition where the well-known function of resonance, cancellation of reactances at resonance and suppression of frequencies outside the resonant frequency are well-known therefore it is the position of the Examiner that the claim/s as presented remain anticipated by Fujimura et al., thus the rejection/s is/are maintained.

**Claims 1, 3, 9, 10, 14 – 23, 26 – 30, 33, 37, 38, 40, 42, 43. 45 – 47, 54, and 55
anticipated by Uchida et al.:**

The Applicant argues that “claim 1 requires an electrical component including a capacitor having a first and second ends and a circuit coupled to the capacitor...”). It is the position of the Examiner that Uchida et al. shows a component including a capacitor having first and second ends (capacitor 10 – Figs. 1A, 1B, 3, 5A, 5B et al.) where the semi-circular plate of capacitor 10 (best illustrated in Fig. 3) may be defined where in view of the circuit diagram in Fig. 4, the second end is connected to ground 13, where the first end may be defined by either or both ends of the semi-circular opposing end where although being a split end, the dual end is regarded as one end as illustrated in the equivalent circuit diagram of the capacitor C shown in Fig. 4. The circuit is defined by the Examiner as the inductor portion L of the LC filter comprising magnetic windings where Uchida et al. (i.e. Fig. 4) shows an LC filter with an equivalent circuit identical or most nearly identical with Applicant’s “T circuit” shown by Applicant’s Fig. 9. Applicant’s drawings such as Fig. 4A shows a capacitor 102 with a magnetic winding 104 wrapped around the body of the capacitor. Applicant’s Figs. 5 – 8 illustrate the coupled magnetic winding 104 shown in Fig. 4A. Fig. 9 finally shows a circuit representation for application of the device with capacitor C_f in series with L_{esl} and as shown by Uchida et al. in Fig. 4. Applicant’s series R_{esr} is not shown by Uchida et al. however the is merely a parasitic resistance that would also occur in the structure of Uchida et al. For the reasons discussed above with respect to Mullersman and Fujimura et al., Uchida et al. also teaches resonance (col. 8, lines 4-6) thus anticipating the limitation of “cancellation

of the inductance associated with a capacitor". The Applicant recites the disclosure of Uchida et al. on page 12 of 17 in the Amendment and states the "problems set forth beginning at column 1, line 64 (emphasis added)". The arguments further state where "the circuit eliminates a capacitor component in an LC filter by providing a capacitor electrode in opposition to two inductively coils as explained beginning at column 2, line 20 (emphasis added). Thus, Uchida does not disclose a discrete capacitor having first and second ends as claimed. Applicant submits that the coils acting as a capacitor electrode provide a distributed circuit that cannot be considered an end of a capacitor, as required by the claimed invention" to which the Examiner disagrees. The structure of the LC filter of Uchida et al. incorporates capacitor electrode 10 as well as inductors L1 and L2. The equivalent circuit illustrated in Fig. 4 shows the separate inductance and capacitance elements, discussed above where either end and/or both ends of semi-circular capacitor electrode 10 may be defined as an end of the capacitor further illustrated in the equivalent circuit in Fig. 4. While the Examiner agrees the LC structure of Uchida et al. may not be defined comprising "discrete" elements, Uchida et al. nevertheless anticipates the claims as presented where the capacitor electrode 10 comprises the capacitor component albeit integrated with the inductance coils forming the integral LC filter. Finally it is argued that "Uchida does not recognize or address canceling the inductance of a capacitor as claimed, but rather focuses on reducing interconnection residual inductance by eliminating a capacitor component and suppressing a series resonance". The Applicant argues that "models" such as shown in Fig. 4 of Uchida et al. do not exhibit parasitic impedances but rather ideal

characteristics. Fig. 4 of Uchida et al. is merely an equivalent circuit where Uchida et al. shows no values of inductance or capacitance but rather illustrates the equivalent circuit of the LC filter such as shown by Applicant's Fig. 9 and discussed above. With respect to arguments where Uchida et al. "accounts for interconnect residual inductance for component connections but does not teach or suggest canceling the inductance (associated with stored magnetic energy) of a physical capacitor. Uchida attempts to achieve high-frequency attenuation by using a structure that "eliminates the need to provide a capacitor independently of the coils, resulting in greatly reduced residual inductance", it is the position of the Examiner that only the claims are patentable and that Uchida et al. anticipates the claims as presented. The Examiner further notes it has been well-established in the courts that claiming and/or suggesting of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977) where the equivalent circuitry shown in Fig. 4 of Uchida et al. is identical or most nearly identical with Applicant's "T circuit" shown Fig. 9, thus inherently having the same characteristics as that claimed in the Applicant's invention. For the reasons given above it is the position of the Examiner that Uchida et al. anticipates all limitations thus the rejection/s is/are maintained. It is the position of the Examiner that burden of proof is with the Applicant to show the difference between the Applicant's invention versus the prior art and/or where the device of Uchida et al., shown with identical or most nearly identical equivalent circuitry as shown in the current application

would have the same or inherent functionality as that claimed by the Applicant (e.g. with respect to what is being claimed), thus Applicant is invited to provide such evidence.

Claims 6 – 8, 10, 41, and 43 being unpatentable over Mullersman in view of Waffenschmidt et al.:

The Applicant submits that “Waffenschmidt fails to remedy any of the deficiencies of Mullersman described above. Waffenschmidt merely discloses a capacitor integrated into a transformer via a multi-layer foil winding of planar conductive electrodes...that the foil winding of Waffenschmidt is quite different than that shown by Mullersman”. The structure of Waffenschmidt is a capacitor coupled with a transformer and formed on a multi-layer foil. The structure of Mullersman is an integrated LC device formed on a circular form. The introduction of Waffenschmidt is merely used to show coupled windings formed on a foil as claimed in claim 6, flexible material (claims 7, 41) and magnetic material (claims 10 and 43) where Mullersman does not explicitly disclose the above limitations. The modification of Waffenschmidt would have realized the advantageous benefit of providing space savings, thus suggesting the obviousness of the modification and meeting the limitations of the claims. The Examiner further notes with respect to any arguments or suggestions with regard to the combinability of the prior art, it has been well-established in the courts that the prior art devices are not physically combinable, “[I]t is not necessary that the inventions of the references be physically combinable to render obvious the invention under review.” *In re Nievelt*, 482 F.2d 1252, 965, 179 USPQ 224, 266 (CCPA 1973) where “Combining the teachings of

references does not involve an ability to combine their specific structures.”, thus the Examiner submits that the modification of the foil structure of Waffenschmidt does not change the operation of Mullersman but merely incorporates the use of a well-known foil elements, wrapped in a similar circular structure, in an LC combination similar to Mullersman to reduce size as is also well-known and desirable in the art, thus the claims remain anticipated by Mullersman in view of Waffenschmidt et al., thus the rejection/s is/are maintained.

Claims 10 and 43 being unpatentable over Fujimura et al. in view of Chang et al.:

It is argued that Chang et al. merely discloses transformer winding techniques where Chang et al. is introduced to show a well-known magnetic core material, where Fujimura et al. merely discloses a generic core 11. The Examiner submits that it would have been obvious to use a magnetic core such as explicitly shown by Chang et al., thus the rejection/s is/are maintained.

Claims 50 – 52, 56 and 57 being unpatentable over Uchida et al. in view of Hamill et al.:

The Applicant requests clarification of the “capacitively coupled conductors”. The coupled inductor or transformer comprising windings L1 and L2 and capacitor C1 of Hamill et al. is shown in Fig. 5 where Fig. 2 further details the switch of Hamill et al. The “capacitively coupled conductors” may be referred to any conductor coupled or attached to the first and second end of the capacitor, thus conductors on either side of C1 would

comprise “capacitively coupled conductors” such as conductors attached to L1 and L2 or alternatively where L1 and L2 are directly attached to C1. Hamill et al. further details the “capacitive coupling” with respect to Fig. 3a where C1 is split into a mirror image where “the first step is to separate the coupling capacitance into two series capacitances Ca and Cs”. This is not to say that the capacitor shown in either Uchida et al. or Hamill et al. would be split into a mirror image but merely to distinctly show the obvious coupling capacitance of the attached conductors or inductors at either end of the capacitor, where by the wording of the claim, it is well-known that any conductor attached to two different ends of a capacitor comprises “capacitive coupling”.

Claims 58 and 59 being unpatentable over Uchida et al. and Hamill et al. and further in view of Smith et al.:

The combination of Uchida et al. and Hamill et al. is discussed above. The Applicant argues “that Smith does not provide any of the missing teachings described above for Uchida and/or Hamill” to which the Examiner disagrees. The combination of Smith et al. is used to show coupled windings formed on an integrated circuit.

Uchida et al. and Hamill et al. merely show generic circuits or components defined as a circuit. The integrated circuit or IC is well-known in the art and the modification to make any component or LC device in a IC or integrated circuit is also well-known. Thus it is the position of the Examiner that Uchida et al. and Hamill et al. and further in view of Smith et al. meet the limitations of the claim/s and the rejection/s is/are maintained.

Claims 60 and 61 being unpatentable over Uchida et al. and Hamill et al. and further in view of Waffenschmidt et al.:

Claim 60 has been amended where the coupled windings are printed. It is the position of the Examiner that the limitation "printed" is given no patentable weight in a device claim, where only the end product which is patentable thus any limitations directed to a specific nature of "making" is regarded as product-by-process and that the claim is directed to the product per se, no matter how such product was made. It has been well established by the Courts that it is the patentability of the final product per se which must be determined in a "product-by-process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product-by-process" form or not.

See *In re Hirao*, 190 USPQ 15 at 17 (footnote 3); *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessman*, 180 USPQ 324, *In re Avery*, 186 USPQ 161; *In re Marosi et al.*, 218 USPQ 289; and in particular *In re Thorpe*, 227 USPQ 964. It should be noted that the applicant has the burden of proof in such cases, as the above case law makes clear.

As detailed in prior office action of record, Waffenschmidt et al. discloses a well-known art-recognized equivalent method of forming windings such as CVD, thus the claim remains unpatentable over Uchida et al. and Hamill et al., as applied to claim 56 above, and further in view of Waffenschmidt et al.

Claim 61 has not been amended and remains unpatentable over Uchida et al. and Hamill et al., prior art disclosed by the Applicant as applied to claim 56 above, and further in view of Waffenschmidt et al.

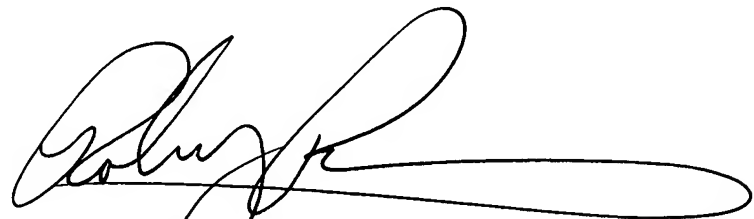
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean O Takaoka whose telephone number is (571) 272-1772. The examiner can normally be reached on 8:30a - 5:00p Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dot
June 24, 2004

A large, stylized handwritten signature in black ink, likely belonging to Robert Pascal, is written over a horizontal line.

Robert Pascal
Supervisory Patent Examiner
Technology Center 2800